

## **REMARKS**

### **Summary of the Amendment**

Upon entry of the present Amendment, Claims 10, 14, 18, and 20-22 will have been amended. Accordingly, Claims 10-22 remain pending in the present application. By the present Amendment and Remarks, Applicant submits that the rejections have been overcome, and respectfully requests reconsideration of the outstanding Office Action and allowance of the present application.

### **Summary of the Office Action**

In the subject Office Action, Claims 10-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Shiv et al (US 6,611,153).

### **Traversal of Rejection under 35 U.S.C. § 102(b)**

Applicant respectfully traverses the rejection of Claims 10-22 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,611,153 to Shiv et al. (hereinafter "SHIV").

The Examiner submits that SHIV discloses all the elements of the claims. In particular, the Examiner states "Shiv discloses a vibration-type driving device comprising a piezoelectric vibration element (20) including an elastic body and an electromechanical conversion element (40) having at least two electrodes ... capable of causing the electric body to excite vibrations with two driving voltages of respective phases having the same frequency applied to the two electrodes. Shiv discloses longitudinal and transverse vibration nodes that generate elliptical vibratory motion in the nub 32. (See column 5, lines 10-14) Shiv is silent regarding the driving voltages and phase difference between them. However, it is inherent in the invention that two driving voltages with the same phase will form a first flexural vibration mode and two driving voltages with opposite phases will form a second flexural vibration mode, since the output is an elliptical movement of the nub."

*A Review of SHIV*

Fig. 1A shows a piezoelectric motor (20) having four electrodes (31-34) on a top surface and another electrode (36) on a bottom surface. Electrodes 31 and 33 are electrically connected together and electrodes 32 and 34 are connected together. To produce a clockwise vibration in the vibration nub (40), a signal is inputted into electrodes 31-33 and 36 while electrodes 32-34 are passive. Likewise, to produce a counterclockwise vibration in the nub (40), a signal is inputted into electrodes 32-34 and 36 while electrodes 31-33 are passive.

*Independent Claim 10*

Applicant's independent Claim 10 as amended recites, *inter alia*, ... wherein the first flexural vibration mode and the second flexural vibration mode are simultaneously formed to generate combined vibration and the combined vibration drives said driven element.

On the other hand, SHIV does not teach the aforementioned features. Shiv does not disclose forming the first and second flexural vibration modes simultaneously to generate combined vibration. Further, SHIV does not disclose the combined vibration drives the driven element. Rather, the Examiner provides that "Shiv discloses longitudinal and transverse vibration nodes that generate elliptical vibratory motion in the nub 32. (See column 5, lines 10-14) Shiv is silent regarding the driving voltages and phase difference between them. However, it is inherent in the invention that two driving voltages with the same phase will form a first flexural vibration mode and two driving voltages with opposite phases will form a second flexural vibration mode, since the output is an elliptical movement of the nub." The Examiner does not indicate, and SHIV does not so disclose, that the first and second flexural vibration modes are formed simultaneously to generate combined vibration, and the combined vibration drives the driven element.

For the foregoing reasons, because SHIV fails to disclose the above-noted features of the present invention, Applicant submits that SHIV fails to disclose each and every feature of the present invention as recited in Independent Claim 10.

Accordingly, Applicant submits that the Examiner has failed to provide an adequate evidentiary basis to support rejection under 35 U.S.C. § 102(b) and that the rejection of Independent Claim 10 is improper and should be withdrawn.

*Dependent Claims 11-13*

Applicant further submits that dependent Claims 11-13 are allowable at least for the reason that these claims depend from allowable independent Claim 10 and because these claims recite additional features that further define the present invention.

Accordingly, Applicant submits that the Examiner has failed to provide an adequate evidentiary basis to support rejection under 35 U.S.C. § 102(b), and that the rejection of dependent Claims 11-13 is improper and should be withdrawn.

*Claims 14-22*

Since amended Claims 14, 18, and 20-22 include the same aforementioned features of Claim 10, Applicant further submits that Claims 14-22 are allowable because SHIV fails to disclose the above-noted features of the present invention and that SHIV fails to disclose each and every feature of the present invention as recited in Claims 14-22.

Accordingly, Applicant submits that the Examiner has failed to provide an adequate evidentiary basis to support rejection under 35 U.S.C. § 102(b) and that the rejection of Claims 14-22 is improper and should be withdrawn.

**Application is Allowable**

Applicant respectfully submits that each and every pending claim on the present invention meets the requirements for patentability and respectfully requests the Examiner to indicate allowance of such claims.

**Conclusion**

In view of the foregoing, it is submitted that none of the references of record anticipate or render obvious the Applicant's invention as recited in Claims 10-22. The

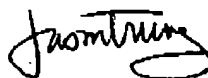
applied reference of record has been discussed and distinguished, while the significant claimed features of the present invention have been pointed out.

Further, any amendments to the claims which have been made in this response and which have not been specifically noted to overcome a rejection based upon prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

If any additional fee is required, please charge Deposit Account No. 502456.

Respectfully submitted,

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